Claims

1. A method for evaluating a service provider by using a computer, said computer implementing the steps of:

storing information on an item of data of a history related to a transaction that is acquired by said service provider when a service provided by said service provider is used;

storing items to be monitored including an item of data used for evaluating the service provided by said service provider;

acquiring the history data related to a transaction acquired by said service provider from said service provider;

evaluating the service provided by said service provider based on the acquired history data related to a transaction that is acquired by said service provider and on the item of data included in said items to be monitored; and

outputting a result of said evaluation.

2. A method for evaluating a service provider according to claim 1, wherein data included in said items to be monitored is extracted at the time of acquiring the history data related to a transaction acquired by said service provider from said service provider; and

said extracted data is transmitted to another computer which satisfies a predetermined condition.

3. A method for evaluating a service provider by using a computer, said computer implementing the steps of:

storing information on an item of data of a message that is sent and received by said service provider;

storing items to be monitored including an item of data used for evaluating a service provided by said service provider;

acquiring the data of the message that is sent and received by said service provider from said service provider;

evaluating the service provided by said service provider based on the acquired data of the message that is sent and received by said service provider and on the acquired data included in said items to be monitored; and

outputting a result of said evaluation.

4. A method for evaluating a service provider by using a computer, said computer implementing the steps of:

storing information on an item of data of a message that is sent and received by said service provider;

storing information on an item of data of a history related to a transaction that is acquired by said service provider when a service provided by said service provider is used;

storing items to be monitored including an item of data used for evaluating the service provided by said service provider;

acquiring the data of a history related to a transaction that is acquired by said service provider and the data of a message that is sent and received by said service provider from said service provider;

evaluating the service provided by said service provider based on the acquired history data related to a transaction acquired at said service provider, the data of a message that is sent and received by said service provider and the item of data included in said items to be monitored; and

outputting the result of said evaluation.

5. A system for evaluating a service provider, said system comprising:

means for storing information on an item of data of a history related to a transaction to be acquired by said service provider when a service provided by said service provider is used;

means for storing items to be monitored including an item of data used for evaluating the service provided by said service provider;

means for acquiring the data of a history related to a transaction to be acquired by said service provider from

said service provider;

means for evaluating the service provided by said service provider based on the acquired data of a history related to a transaction acquired by said service provider, and the item of data included in said items to be monitored; and

means for outputting a result of said evaluation.

6. A business support management system which supports a change in a business flow that uses a plurality of service providers providing a service to execute a business processing by using a computer, said system comprising:

a business service information registry which stores information related to a connection specification which defines a data structure of a message to be sent and received, stores information related to a history specification which defines a data structure of a history related to a transaction to be acquired in said service providers when said service is used, stores information related to a flow definition which defines said business flow, and stores business service evaluation information on a service to be provided by said service provider, when a connection is made to said service providers and said service is provided;

a business service information collector which

stores items to be monitored consisting of definition
information on items used for evaluating said service,
among said connection specification and said history
specification, collects information that is pursuant to
said items to be monitored from said service provider each
time said service provider processes a request for using
said service, and transmits said collected information to
another computer which satisfies a specific condition as
business service information;

a business service evaluation analyzer which
collects said business service information from said
service provider through said business service information
collector, performs tabulation of such business service
information, and then stores a result of said tabulation in
said business service information registry as said business
service evaluation information;

a monitoring/evaluation information designator which
notifies said business service information collector and
said business service evaluation analyzer of said items to
be monitored and a definition of business service
evaluation information;

an access controller which permits an access to said
business service evaluation information that is stored by
said business service information registry to a user of
said service who satisfies a specific condition;

business process management which, with said connection specification, said history information, said flow definition and said business service evaluation information that are stored by said business service information registry being retrieval conditions, retrieves said service provider or a service to be provided by said service provider, defines data processing change procedure information which is used to connect components of said business flow and components of business flow after subjected to a change when the components of said business flow is to be changed, and notifies components of a business flow which will be connected to the components of the business flow after subjected to a change of said data processing change procedure information; and

a message conversion processor which changes a connection procedure with the components of the business flow after subjected to said change based on said data processing change procedure information.

7. A business service management system according to claim 6, wherein the components of said business flow include at least one of a sub-flow, a service provider, a service provided by a service provider, a computer for executing a service to be provided by a service provider, and a program for executing a service to be provided by a service provider.

8. A business service management system according to claim 6, wherein said monitoring/evaluation information designator includes:

means for determining said items to be monitored by acquiring, from said business service information registry, said connection specification and said history specification of said service provider to be monitored;

means for determining a definition of said business service evaluation information that is used by said business service evaluation analyzer to collect business service information for processing from said items to be monitored; and

means for notifying said business service evaluation analyzer of said items to be monitored and definition of said business service evaluation information.

9. A business service management system according to claim 6, wherein said business service evaluation analyzer includes:

means for registering said business service evaluation information in said business service information registry;

means for notifying said business service information collector of the definition of said business service evaluation information and said items to be monitored so as to monitor said items to be monitored; and

means for determining access authority to refer to said business service evaluation information.

10. A business service management system according to claim 6, said business service information collector includes:

means for authenticating said business service information collector to determine whether said items to be monitored notified from a pertinent business service evaluation analyzer may or may not be sent to a pertinent business service evaluation analyzer;

means for determining access authority to refer to said business service evaluation information; and

means for recording an instruction to monitor said items to be monitored.

11. A business service management system according to claim 6, wherein said service provider includes:

means for allowing said business service collector to collect information, every time said messages containing information pertinent to said items to be monitored are sent and received, that is pertinent to such items to be monitored out of such messages; and

means for allowing said business service collector to collect information, every time said sending and receiving processing is encountered, that is pertinent to said items to be monitored out of a history.

12. A business service management system according to claim 6, wherein said business service collector includes:

means for determining a transmission destination business service evaluation analyzer of information pertinent to said collected items;

means for determining whether or not information pertinent to said collected items to be monitored should be sent to said transmission destination business service evaluation analyzer; and

means for decrypting information pertinent to said collected items to be monitored as said business service information, and then sending such encrypted information to said transmission destination business service evaluation analyzer.

13. A business service management system according to claim 6, wherein said business service evaluation analyzer includes:

means for decrypting said business service information received;

means for repeating said reception processing until all said business service information collected from a plurality of transactions that are sent and received among said plurality of service providers or among said services are received, putting said business service information

received together according to one said transaction, and storing such information as said business service information for the entire business flow, in order to realize one said service;

means for repeating said reception processing until all said business service information acquired from said plurality of transactions that realize one business, putting said business service information received together according to one said business, and storing such information as said business service information for the entire business;

means for collecting said service information and creating said business service evaluation information; and

means for registering said created business service evaluation information in said business service information registry.

14. A business service management system according to claim 6, wherein said business process management includes:

means for retrieving said service provider, said service, or said sub-flow substituting for designated said service provider, said service or said flow from said business service information registry, with said business service evaluation information, said connection specification, said history specification and said flow

definition being as retrieval conditions;

means for acquiring said history specification and said connection specification of said service provider which works as said client or said server to said designated service provide, service or sub-flow, said service provider which is selected out of said sub-flows and said retrieval results, and said service or said flow;

means for creating said data processing change procedure information which is used to change said designated service provider, service or sub-flow to said selected service provider, service, or sub-flow;

means for uploading said created data processing change procedure information to a service provider to which a connection destination will be changed; and

means for transmitting an instruction to change connection destination to said service provider to which connection destination will be changed.

15. A business service management system according to claim 14, wherein said service provider to which connection destination will be changed includes:

means for generating a connection program based on said data processing change procedure information received;

means for stopping a service based on said instruction to change the connection destination received; and

means for capturing said connection program, with the program booted, and changing the connection destination.

16. A business service management system according to claim 6, wherein said message conversion processor includes:

means for judging whether said message received is an existing message before changing a flow or a new message that was generated according to a change of connection destination;

means for transferring said message to a processor unique to said service provider if said judgment result reveals that said message is an existing message;

means for transferring such new message to said processor unique to said service provider after processing the new message by using said connection program, if said judgment result reveals that said message is said new message and processing will be executed in said processor unique to said processor;

means for receiving such new message processed by said connection program, if said judgment result reveals that said message is said new message and such processing unique to said service provider will be outsourced; and

means for judging whether the transmission destination of said message is an existing service or a new service, executing transmission of said message received if

the transmission destination is an existing service, or

transmitting said message received to a new connection

destination after processing said new message by using said

connection program if the transmission destination is a new

service.